

OBJECTIVES: To describe long term outcomes of one of the first cohort of HIV positive patients started on antiretroviral treatment (ART) in Sub-Saharan Africa. **METHODS:** We report 10-years outcomes including mortality, retention, CD4-count response, viral suppression (achievement of viral load (VL) <400 copies/ml by month-6) and failure (2 consecutive VL>400 copies/ml or 1 VL>5000 copies/ml-as per WHO guidelines), drug substitution from a prospective cohort of 559 patients initiating ART between April 2004–April 2005 and followed up for 10-years in Kampala, Uganda. **RESULTS:** Of 559 patients, 70% were female, median age (IQR) was 38 (33–44) years, median CD4-count (IQR) 98 (21–163) cell/μL, VL (log10) 5.4 (5.0–5.8) copies/ml. 414 (74%) were started on stavudine+lamivudine+nevirapine, 145 (26%) on zidovudine+lamivudine+efavirenz. After 10 years 361 (65%) patients were still in the study; 123 (22%) had died; 30 (5%) were lost to follow-up; 27 (5%) transferred; 18 (3%) withdrew consent. Mortality was high in the first year (80/123, 65%) and substantially reduced over time. The median gain in CD4-count (IQR) was of 477 (199–738) cell/μL and 321 (57.4%) reached 400 cells/μL (lower limit of normal CD4-count in Ugandans). 82% (388/473) with available VL at month-6 achieved viral suppression (VL<400 copies/ml), and of those 44 (9.1%) experienced viral failure after a median time (IQR) of 45 (17–69) months on ART. 73 (13.1%) switched to second line regimen due to ART failure. We observed 184 drug substitutions; before the new WHO guidelines release (2009) 52% of these (74/142) were due to toxicity as compared to only 17% (7/40) after 2009. **CONCLUSIONS:** High rate of early mortality due to advanced disease at presentation resulted in suboptimal retention; however good treatment response and first line durability was achieved in patients retained on treatment. Rates of drug substitution were high particularly up to 2009 due to the use of less tolerated regimens in this period.

PIN13

TRANSITIONAL CLINIC UTILIZATION AND GENERAL WELL BEING OF UGANDAN YOUNG ADULTS LIVING WITH HIV/AIDS

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OBJECTIVES: To determine the relationship between utilization of the HIV transition clinic utilization at the Infectious Diseases Institute (HTC-IDI) and general wellbeing of young adults living with HIV/AIDS (YALHA). **METHODS:** This cross sectional study was conducted between March and May 2012 at the HTC-IDI in Kampala, Uganda. The study recruited 379 YALHA who were between the ages of 15–24 years. HTC-IDI utilization was categorized into two levels; regular (kept all the appointments visits) and irregular (missed one or more appointments visits) utilization. The general well-being of YALHA was measured using the 18-item general wellbeing schedule (GWS-18). The responses to each item of the GWS-18 were aggregated and the scores were converted to a 0–100 point scale (100= Highest general wellbeing status). Factor analysis was used to systematically group the GWS-18 questionnaire. Unpaired t-test, and multivariable logistic regression were used to determine the association between utilization and general wellbeing. **RESULTS:** The mean (SD) age was 22.5±2.0 years with an age range of 15 to 24 years and the mean (SD) CD4 cell count was 402.3±293.3 with a range of 1–2603/μL, 231 (60.9%) were currently on ART. Of the 379 YALHA, only 32.4% regularly utilized the HTC. The GWS-18 tool was highly acceptable, easily administered and was systematically grouped into two factors (anxiety and self-control). The overall scale demonstrated good internal consistency with Cronbach's alpha of 0.82. There was no statistically significant association between general wellbeing and utilization of the HIV transition clinic. **CONCLUSIONS:** The current study found no significant relationship between HTC-IDI utilization and the general well being of YALHA. Future studies should use longitudinal designs to ensure long-term follow up of the YALHA using disease specific generic tools since well-being has a tendency of fluctuating depending on emotional and physical feelings, which may not be captured in a cross sectional study.

PIN14

THE EPIDEMIOLOGIC BURDEN OF HEPATITIS C VIRUS INFECTION IN EGYPT

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OBJECTIVES: Chronic infection with hepatitis C virus (HCV) is a major public health concern in Egypt. Prevalence data exist, but methods to estimate the epidemiologic burden have varied and there has been no systematic approach to synthesize these data. The objective of this study is to synthesize published reports of prevalence and estimate the total number of HCV cases in Egypt. **METHODS:** A systematic search was implemented by two reviewers in the EMBASE, Medline, and Cochrane databases, to identify and extract data from population-based studies of the epidemiologic burden of HCV in Egypt. Estimates based on laboratory-confirmed HCV infection, published between January 1, 1995 and May 13, 2014, were included. Published data were supplemented with data from the National Blood Transfusion Center (NBTC) in Egypt. 2014 population estimates were used to project the number of persons infected based on synthesized prevalence estimates. **RESULTS:** From 630 abstracts, 23 studies were identified. The population-based Demographic and Health Survey (DHS) estimated the prevalence of active infection at 9.8% and overall HCV infection at 14.9%; which is likely an underestimate of the total population affected since DHS was restricted to people 15 to 55 years of age. Estimates from blood donors from the NBTC were ~7.5%, supporting the low estimate from DHS. Population-based estimates from studies conducted in areas of high infectivity were as high as 40 to 50% HCV prevalence. Based on a prevalence estimate of 15% (12–18%), approximately 13 million (10–16 million) people are infected with HCV in Egypt. **CONCLUSIONS:** Although estimates of the prevalence of HCV vary, the wealth of evidence suggests that there is an extensive epidemiologic burden in Egypt. With the availability of new therapies, decision-makers and clinicians need accurate estimate of disease prevalence to assess the cost-benefit ratio of new HCV treatments.

PIN15

BURDEN OF INFLUENZA B IN 9 EUROPEAN COUNTRIES: A LITERATURE REVIEW

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OBJECTIVES: Seasonal influenza causes substantial public health burden worldwide. Currently, trivalent vaccines containing two strains of influenza A and one of the two circulating influenza B strain lineages (Yamagata and Victoria) are mostly used. In recent years, the co-circulation of these two influenza B lineages has created some mismatch with the recommended vaccine. The objective is to summarize the epidemiology, burden and seasonality of influenza B in nine European countries: Switzerland, Austria, Belgium, Luxembourg, Finland, Greece, Czech Republic, Slovakia and Estonia. **METHODS:** Comprehensive review of PubMed and Cochrane library as of the year 2003. Additionally, a search in other data sources, such as websites of WHO, ECDC and national surveillance for influenza was performed. **RESULTS:** 10 peer-reviewed articles were included: 10 reported on epidemiology, 6 on disease burden and 3 on circulating strains. From grey literature, additional data on influenza B circulating lineages and vaccine were provided. Incidence data were only available for Finland. No information was found on incidence or prevalence of influenza B for any other country. Articles lacked a defined catchment population and only proportions of influenza B among a specified population or surveillance samples could be obtained. Though Influenza B-associated hospitalization rate among children <1 year was reported in one article for Finland, no additional information was found on influenza B-associated hospitalizations or outpatient visits or emergency room for any of the other countries. Information on other outcome measures for disease severity was scarce as well. Seasonal variation and circulating strains were scarcely presented in peer-reviewed literature; some data were found in grey data sources though. **CONCLUSIONS:** While surveillance systems have identified the co-circulation of 2 influenza B lineages and vaccine mismatch, there is still a low awareness about its burden probably due to the lack of appropriately designed studies in the assessed countries.

PIN16

POTENTIAL EPIDEMICS OF DRUGS RESISTANT BACTERIA IN POVERTY STRICKEN COUNTRIES LIKE PAKISTAN

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OBJECTIVES: Antibiotics are the only promising drugs used to control bacterial diseases but their inappropriate use has rendered bacteria resistant. Bacteria have been found resistant to all classes of antibiotics including the last line antibiotics carbapenems. These multidrug resistant bacteria are a constant threat to human health. The aim of this study was to check for pathogenic contaminants in drinking water samples across Pakistan check their drug resistant level too. **METHODS:** Drinking water samples were collected from different regions across Pakistan and microorganisms present in these samples were identified. Kirby-Bauer disc diffusion tests were used to check the pattern of antibiotic resistance. Interpretation was done according to Clinical and Laboratory Standards Institute (CLSI) recommendations. **RESULTS:** Almost all of the water samples collected were contaminated with bacteria or protozoans. All of the contaminated samples had *Escherichia coli*, while many of them had *Cryptosporidium* spp and *Giardia* spp. *Escherichia coli* isolates were found resistant to many groups of antibiotics including carbapenems (17%). Antibiotics were not helpful against *Cryptosporidium* and *Giardia* spp. **CONCLUSIONS:** Because of the unhygienic living style and poverty, the threat of these resistant bacteria is increasing, and since carbapenems are drugs of the last resort such a high prevalence of resistant bacteria in drinking water is an alarming threat and holds the potential of future outbreaks.

PIN17

DISABILITY-ADJUSTED LIFE YEARS (DALYS) AS A COMPOSITE MEASURE TO EXPRESS THE BURDEN OF TICK-BORNE ENCEPHALITIS (TBE) IN SLOVENIA

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OBJECTIVES: TBE is a serious central nervous system disease, which may lead to permanent neurological sequelae or even death. TBE is becoming a high burden in many parts of Europe, Asian Russia, Siberia, Asian former USSR and Far East. The burden is usually expressed by only the incidence or death. DALYs give a composite assessment of TBE's burden while only the incidence or deaths does not really indicate the real impact on burden. The purpose of the present study is to estimate the burdens from the population- and individual perspectives for TBE in Slovenia, measured in DALYs and evaluate the possibilities of reducing this burden. **METHODS:** The burden of TBE in Slovenia is estimated by using the updated DALYs' methodology first introduced by Murray and co-workers in the Global Burden of Disease (GBD) project. Adjustment to correct for under-reporting and under-ascertainment is applied. Calculations were based on the health outcomes of the natural course of TBE. **RESULTS:** From the population perspective DALYs amount to 3,450 while from the individual perspective they amount to 3.1. The neurological sequelae have the largest impact on the overall DALYs measurement for TBE. **CONCLUSIONS:** Rising awareness and increasing vaccination coverage for TBE is proposed for the whole population to reduce the burden and provide health benefits to the population as a whole in Slovenia.

PIN18

META-REGRESSION ON EUROPEAN ZOSTER INCIDENCE

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OBJECTIVES: Nowadays populating a decision-making model with input data has become a cumbersome process due to the numerous choices of data sources. To tackle this issue, regulatory and re-imbursment agencies encourage "evidence synthesis for decision making". To this end meta-analysis methods are gaining renewed interest as a means of summarizing results of multiple scientific papers